Appln. No.: 10/551,245

Reply to Office action of April 17, 2007

LISTING OF CLAIMS:

1-7(Cancelled).

8(Currently Amended). A piston ring having a gap, a friction surface, an inner surface and upper and lower flanks, a non-constant cross-section cut which when viewed in a circumferential direction is wider in the area of the gap as compared to an area diametrically opposed from the gap;

said piston ring having a radial wall thickness that varies, where in the area of the gap the wall thickness is smaller than the area diametrically opposite from the gap, wherein the relationship between the wall thickness and the cross-section cut is continually so formed that the piston ring, viewed in the circumferential direction presents a constant twist angle (\$\phi\$).

9(Previously Presented). The piston ring according to claim 8, wherein the constant twist angle (\$\delta\$) is satisfied by the following formula:

 $(\phi) = Mt/G*I(\phi)$

where

 ϕ is the twist angle

G is the Slide module

I is the polar surface moment of inertia

Mt is the bending load.

10(Previously Presented). The piston ring according to claim 8, wherein the crosssection cut is formed by a bevel.

11(Previously Presented). The piston ring according to claim 10, wherein the bevel has an angle \propto that varies in the circumferential direction.

12(Previously Presented). The piston ring according to claim 10, wherein the bevel has an angle α that is constant in the circumferential direction.

13(Previously Presented). The piston ring according to claim 8, wherein the cut is formed by means of an angular exclusion.